Exam: S.Y.B.Com (Financial Management) Sem- IV	Date:
Subject: Corporate Finance	Q.P.Code: 70007

INSTRUCTION FOR EXAMINERS AND MODERATORS:

1. Stepwise marking scheme is provided for each answer.
2. Marks to be allotted even if different formats or methods adopted provided the answer are logically correct.
3. For all theory question the examiner can adopt their own sanction and if possible to give full marks if the candidate has justified the answer.
4. For any query please feel free to contact:

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Q1 A

State whether the statements are true or false. **(Any 8)**

1	2	3	4	5	6	7	8	9	10
FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE	FALSE	TRUE

Q1 B

Match the column. **(Any 7)**

	Column "A"		Column "B"
1	Retained Earnings	I	Internal Sources
2	Bad Debts	Ii	Default Cost
3	Equity Shares	Iii	Voting Rights
4	Modern Method	Iv	Capital Structure Planning
5	BEP	V	No profit – No loss
6	P/V Ratio	Vi	Relationship between Profit & Sale
7	Assets	Vii	Liability + Equity
8	WACC	Viii	Combined Cost of Capital
9	Capital Structure	Ix	Debt + Equity
10	NPV	X	Cash inflow – Cash outflow

Q2 A

(a) Computation of Weighted Average Cost of Capital at Book Value

Sources	Amount	Proportion	After tax Cost	Total Cost after Tax
Equity Capital	90,000	0.45	14%	6.3
Retained Earnings	30,000	0.15	13%	1.95
Preference Share	20,000	0	10%	1.00
Debentures	60,000	60,000	5%	1.50
Total	2,00,000	-	-	10.75%

Weighted Average Cost of Capital (WACC)= 10.75%

(b) Computation of Weighted Average Cost of Capital at Market Value

Sources	Amount	Proportion	After tax Cost	Total Cost after Tax
Equity Capital	1,80,000	0.692	14%	9.688%
Retained Earnings	-	-	-	-
Preference Share	20,000	0.077	10%	0.77%
Debentures	60,000	0.231	5%	1.155%
Total	2,60,000	-	-	11.61%

Weighted Average Cost of Capital (WACC)= 11.61%

OR

Q2.B

Particulars	**2016 (Rs.)**	**2017 (Rs.)**
Total Cost	12,96,000	18,72,000
Sales	14,40,000	21,60,000
Profit	1,44,000	2,88,000

a) PV Ratio = 20%

b) Fixed Cost = Rs. 1,44,000

c) Break Even Sales = Rs. 7,20,000

d) Required Sales = Rs. 37,20,000

e) Margin of Safety = Rs. 7,20,000

Q3.A

Evaluation of Capital Plans

Particulars	Plan 1 (Rs.)	Plan 2 (Rs.)	Plan 3 (Rs.)
EBIT	200000	200000	200000
Less: Interest	20000	74000	137500
EBT	180000	126000	62500
Less: Tax @ 50%	90000	63000	31250
EAT	90000	63000	31250
Less: Preference Dividend	-	-	-
Amount available to Equity Shareholders	90000	63000	31250
EPS	Rs. 3.6 per share	**Rs. 4.2 per share**	Rs. 3.9 per share

Recommendation: Plan 2 i.e. to raise Rs. 6 lakhs by equity capital and Rs. 6 lakhs by debt is recommended since the EPS is the highest in this case.

Working Notes:

1. Capital Structure:

Sources	Plan 1 (Rs.)	Plan 2 (Rs.)	Plan 3 (Rs.)
Equity Share Capital	1000000	600000	200000
Debt	200000	600000	1000000
Total	1200000	1200000	1200000

2. Number of Equity Share:

$$\text{Number of Equity Shares} = \frac{\text{Equity Capital Amount}}{\text{Issue Price Per Share}}$$

Plan 1	Plan 2	Plan 3
= 1000000/40 = 25000 Shares	= 6000000/40 = 15000 Shares	= 200000/25 = 8000 Shares

OR

(4)

Q3. B

AM Co. Ltd.

Evaluation of Capital Plans

Particulars	**Plan i (Rs.)**	**Plan ii (Rs.)**	**Plan iii (Rs.)**
EBIT	9,00,000	9,00,000	9,00,000
Less: Interest • On Old Debentures • On New Debentures	 56,000 -	 56,000 -	 56,000 2,00,000
EBT	8,44,000	8,44,000	6,44,000
Less: Tax @ 50%	4,22,000	4,22,000	3,22,000
EAT	4,22,000	4,22,000	3,22,000
Less: Preference Dividend • On Old PSC • On New PSC	 1,08,000 -	 1,08,000 2,50,000	 1,08,000 -
Amount available to Equity Shareholders	3,14,000	64,000	2,14,000
EPS	7.84 per share	3.20 per share	**10.7 per share**
MPS= EPS x P/E Ratio	7.84 x 21.4 = 167.99	3.2 x 17 = 54.40	10.7 x 15.7 = 167.99

Plan iii i.e. issue of 8% debentures is recommended since the EPS and MPS both are the highest in this case.

Working Notes:

Return on Capital Employed = 12% on Capital Employed

= 12% x (50,00,000 + 25,00,000)

= 12% x 75,00,000

EBIT = Rs. 9,00,000

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Q4.A

i. **Payback Period Method:**

Year	NPAT	Add: Depreciation	Cash Inflow	Cumulative Cash Inflow
1	10000	40000	50000	50000
2	10000	40000	50000	100000
3	20000	40000	60000	160000
4	20000	40000	60000	220000
5	20000	40000	60000	280000

Therefore, Payback Profitability = 3years + (40000/60000)

= 3.67 Years

ii. **Discounted Payback Period**

Year	Cash Inflow	DF @ 10%	PVCI	Cumulative Cash Inflow
1	50000	0.909	45450	45450
2	50000	0.826	41300	86750
3	60000	0.751	45060	131810
4	60000	0.683	40980	172790
5	60000	0.621	37260	210050

Therefore, Discounted Payback Period = 4 years + (27210/37260)

= 4.73 Years

iii. **Profitability Index**

Year	Cash Inflow	DF @ 10%	PVCI
1	50000	0.909	45450
2	50000	0.826	41300
3	60000	0.751	45060
4	60000	0.683	40980
5	60000	0.621	37260
PV of Cash inflows			210050
less: PV of Cash Outflows			200000
Net Present Value			10050

$$\textbf{Profitability Index} = \frac{\textbf{PV of Cash Inflows}}{\textbf{PV of Cash Outflows}}$$

$$= \textbf{1.05}$$

OR

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Q4. B

Project X

Year	Cash Inflow	PV Factor	PV of Cash Inflows	PV Factor	PV of Cash Inflows
	Rs.	**@ 10%**	**Rs.**	**@ 20%**	**Rs.**
1	35,000	0.91	31850	0.83	29050
2	80,000	0.83	66400	0.69	55200
3	90,000	0.75	67500	0.58	52200
4	75,000	0.68	51000	0.48	36000
5	20,000	0.62	12400	0.41	8200
PV of Cash Inflows			229150		180650
Less: PV of Cash Outflows			200000		200000
Net Present Value			29150		-19350

$$IRR = D1 + \frac{PVCFTD1 - PVcash\ outlays}{PVCFATD1 - PVCFATD2}(D2 - D1)$$

$= 16.01\%$ Approx.

Project Y

Year	Cash Inflow	PV Factor	PV of Cash Inflows	PV Factor	PV of Cash Inflows
	Rs.	**@ 10%**	**Rs.**	**@ 20%**	**Rs.**
1	118000	0.91	107380	0.83	97940
2	60000	0.83	49800	0.69	41400
3	40000	0.75	30000	0.58	23200
4	14000	0.68	9520	0.48	6720
5	13000	0.62	8060	0.41	5330
PV of Cash Inflows			204760		174590
Less: PV of Cash Outflows			200000		200000
Net Present Value			4760		-25410

$$IRR = D1 + \frac{PVCFTD1 - PVcash\ outlays}{PVCFATD1 - PVCFATD2}(D2 - D1)$$

$= 11.58\%$ Approx.

Accept: Project X

Q5 Marks to be given based of concept.